



## **Subsurface Investigation Workplan**

*Dated:*

**August 3, 2005**

*Site:*

**Bigfoot Gas  
2801 Central Avenue  
McKinleyville, California 95519**

**LOP # 12365**

*Prepared for:*

**Big Oil & Tire Co.**

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## 1.0 EXECUTIVE SUMMARY

At the request of Big Oil & Tire Co. (BO&T), the current property owner, and the July 14, 2003 letter, from the Humboldt County Department of Health and Human Services: Division of Environmental Health, SounPacific Environmental Services (SounPacific) has prepared this *Subsurface Investigation Workplan (Workplan)* for the underground storage tank (UST) site (Bigfoot Gas) located at 2801 Central Avenue, McKinleyville, California. A summary of the proposed work is outlined below.

- SounPacific proposes an on-site and off-site subsurface investigation at the Bigfoot Gas site to identify any potential sources of the contamination and further delineation and determine the lateral and vertical extent of the soil and groundwater contamination. Eighteen (18) soil borings will be installed and both soil and groundwater samples will be collected and analyzed for determining the location of potential sources. In order to assist with the future placement of new monitoring wells, four (4) soil borings will be installed from which only groundwater samples will be collected and analyzed for further delineation of the groundwater plume. All collected samples will be analyzed for TPHg, TPHd, TPHmo, BTXE, and fuel oxygenates including MTBE. In addition, collected groundwater samples will also be analyzed for lead scavengers.
- A sensitive receptor survey will be conducted within a 1,000-foot radius of the site to locate all domestic and/or industrial wells and surface water bodies.

## 2.0 INTRODUCTION

This document presents the *Workplan* for BO&T regarding the Bigfoot Gas UST site. This *Workplan* was developed per the letter dated July 14, 2003, from the Humboldt County Department of Health and Human Services: Division of Environmental Health (HCDEH), which concurred with the recommendation to prepare a workplan to identify the source(s) of soil contamination and further delineate the extent of groundwater contamination at the site.

## 2.1 Scope of Work

The scope of work required for a subsurface investigation is outlined in the “Tri-Regional Board Staff Guidelines for Evaluation and Investigation of Underground Storage Tanks.” The investigation according to this document, should define the lateral and vertical extent of the hydrocarbon contamination that was released from the UST system and/or product lines at Bigfoot Gas. It will also show the impact that the release has had on the subterranean soil and groundwater. The goal of this subsurface investigation is aimed at determining the following issues:

- Secondary sources contributing mass to the dissolved phase hydrocarbon plume
- Lateral and vertical extent of soil and groundwater contamination
- Future placement of down gradient monitoring wells
- The need for Interim Remedial Actions

Based on our review of North Coast Regional Water Quality Control Board (NCRWQCB) and HCDEH files, we understand that the minimum scope of work at this stage in the project is to attempt the following goals:

- Identifying the source(s) of soil contamination
- Hydrocarbon plume identification and verification by:
  - Sampling of soil using EPA Method 5035 and analysis using EPA Methods 8260 and 8015
  - Analysis of groundwater using EPA Methods 8260 and 8015
- Completion of a Report of Findings discussing the upcoming investigation including recommendations for further investigations
- Conducting a sensitive receptor survey within a 1,000-foot radius of the site

## 2.2 Site Location

The site is located in McKinleyville, California, with a physical street address of 2801 Central

Avenue, McKinleyville, California 95519. The station is positioned on the northeast corner of the intersection of Murray Road and Central Avenue (Figure 1).

## **2.3 Site Description**

The site is surfaced around the current structure with concrete and asphalt. Site improvements include a single story building with an attached, overhead awning that covers the main dispenser islands. The main structure is approximately 800 square feet and is positioned near the center of the property with the entrance facing west towards Central Avenue. Attached to the main structure is a small out building at the north end of the property that is used for storage (Figure 2).

Two (2) 12,000-gallon split compartmented USTs, located in a single excavation between the station and Central Avenue, are used for the storage of three (3) grades of unleaded gasoline and diesel fuel. Fuel is dispensed from two (2) main dispenser islands located under the awning (Figure 2). BO&T owns, operates, and is therefore responsible for the maintenance and testing of the product lines and the UST system on a regular basis. The site is serviced by public utilities. Surface water is controlled by drainage ditches and storm drains.

## **2.4 Vicinity Description**

The surrounding land use is residential and commercial. An automobile garage is located immediately to the south across Murray Road and properties adjacent to the east, west and north are undeveloped (Figure 3).

## **2.5 Hydrogeologic Setting**

The site is approximately two (2) miles east of the Pacific Ocean and approximately 110 feet above mean sea level (MSL). The site is situated approximately 600 feet south of Norton Creek and 1,400 feet north of Widow White Creek. According to the United States Geological Survey Arcata North Quadrangle California-Humboldt County, 7.5 minute series (Topographic) 1959

(photo-revised 1972), a tributary of Norton Creek is re-routed into an underground culvert along the south side of the site. Norton Creek is also artificially controlled along the eastern side of Central Avenue near the site. These two engineered drainage features intersect near the southwestern corner of the property and flow west, toward the Pacific Ocean (Figure 2). It is uncertain if the engineered drainage along the southern and western boundaries of the site will exhibit any hydraulic influence on groundwater flow directly beneath the site. Topography consists of rolling terrain that gently slopes west toward the Pacific Ocean (Figure 3). The groundwater-monitoring program determined that the groundwater levels varied from one (1) foot to 5.7 feet below ground surface (bgs) (Table 1, Chart 1) and flows in a westerly to northwesterly direction (Figure 4).

This site is located on an uplifted marine terrace, which has informally been named the Savage Creek Terrace (Carver & Burke, 1992). This marine terrace generally consists of non- to poorly-indurated shallow marine sands, with minor silt, clay, and gravel. This marine terrace is relatively flat, moderately incised by surface drainages (small creeks & streams), exhibits some warping, and gently slopes towards the Pacific Ocean (Figure 3). These sediments were deposited on wave-cut benches, which have since been exposed by tectonic uplift and changes in sea level. Marine terrace deposits typically range in thickness up to a few tens of feet and are late Pleistocene in age. Soil development on these marine terraces has broken down minerals within the sands and near the ground surface there is an increased concentration of clays as a result.

## **2.6 Current Site Usage & UST History**

SounPacific understands that the property is currently owned by BO&T of Arcata, California. The main structure is currently used as a retail gas station for the retail dispensing of three (3) grades of gasoline and diesel fuel from USTs on site. On the north section of the property, a commercial propane tank is stored and used for the filling of smaller propane tanks for the public (Figure 2).

Very little information is available prior to the installation of the two (2) 12,000-gallon USTs

that were installed in May of 1991 by Beacom Construction (Beacom). The two (2) 12,000-gallon USTs were installed in the southwestern part of the property (Figure 5). On July 11, 1991, Beacom removed one (1) 2,000-gallon gasoline UST and one (1) 1,000-gallon kerosene UST from separate excavations (Figure 5).

### **3.0 PREVIOUS INVESTIGATIONS**

Previous studies by Clearwater Group, Inc. (CGI) and SounPacific indicated the following historical information:

#### **3.1 1991 Installation of (2) 12,000-gallon Gasoline USTs**

In May of 1991, Beacom collected three (3) groundwater samples (TP-1, TP-2, and TP-3) from test pits during the installation of the current USTs (Figure 5). The samples were analyzed for TPHg, BTXE, and TPH as solvent (TPHs), however, no contaminants were reported (Table 2). In June of 1991, Beacom staff collected six (6) soil samples (W-1, W-2, E-1, E-2, E-3, and S-1) from beneath the product lines (Figure 5) that were analyzed for TPHg and BTXE. Laboratory analysis of the samples, reported TPHg at levels between 1.6 parts per million (ppm) to 210 ppm, with low BTXE concentrations (Table 3).

#### **3.2 1991 Removal of Former Gasoline and Kerosene USTs**

In July of 1991, following the removal of the USTs, Beacom collected two (2) soil samples (PN @ 5'6" and PS @ 5'6") and one (1) groundwater sample (Premium) from the 2,000-gallon gasoline UST removal excavation. In addition, two (2) soil samples (S-1 @ 1'6" and S-3 1'6") were collected from beneath the product lines (Figure 5). These samples were analyzed for TPHg and BTXE. Laboratory analysis reported TPHg and BTEX in all the samples, with concentrations up to 5,000 ppm TPHg in the soil and 320,000 ppb in the groundwater (Tables 2-3). Beacom also collected two (2) soil samples (KE @ 6' and KW @ 6') and one (1) groundwater sample (Kerosene) from the 1,000-gallon kerosene UST removal excavation (Figure 5). These samples were analyzed for TPH Solvent (TPHs). Laboratory analysis reported no TPHs in the soil; however, 1,500 ppb TPHs was reported in the groundwater, (Tables 2-3).



### 3.3 1995 CGI Investigation

In November of 1995, CGI staff collected soil samples from five (5) boring locations (B-1, SB-1, SB-2, SB-3, and SB-4) near the former gasoline UST (Figure 5). These samples were analyzed for TPHg, BTXE, TPHd, TPHs, and lead (Table 3). TPHg and BTEX was reported in four (4) of the nine (9) samples, with a maximum concentration of TPHg of 5,600 ppm

### 3.4 2000 SounPacific Investigation

On September 20, 2000, SounPacific staff collected soil samples from nine (9) boring locations (B-1, B-2, B-3, B-5, B-6, B-7, B-8, B-9, and B-10) (Figure 5). Soil samples were analyzed for TPHg, BTXE, and MTBE (Table 3). A soil sample from boring B-5 was also analyzed for TPHd due to empirical evidence observed in the field (Table 3). Laboratory analysis of the majority of the samples reported either low or non-detect levels of TPHg, however, a sample from boring B10 did report TPHg at 1,400 ppm. Also on September 20, 2000, SounPacific collected groundwater samples from eight (8) of the nine boring locations (B-1, B-2, B-3, B-6, B-7, B-8, B-9, and B-10) (Figure 5). Groundwater samples were analyzed for TPHg, BTXE, MTBE; six (6) fuel oxygenates, and dissolved lead. Laboratory analysis of the samples reported TPHg and BTEX in three of the samples; however, MTBE was present in six of the samples (Table 2).

### 3.5 2002 SounPacific Investigation

Further subsurface investigation was conducted at the Bigfoot Gas site during April 2002, in accordance with the approved SounPacific *Subsurface Investigation Workplan*, dated April 10, 2001. The work consisted of drilling seven (7) borings (B-11, B-13, B-14, B-15, B-16, B-17, and B-18) for the collection of soil and grab groundwater samples and the installation of six (6) groundwater monitoring wells (Figure 5). Deviations from the Workplan included the moving of proposed borings, PB-16 and PB-18 and the conversion of proposed boring PB-12 into monitoring well MW-6 after receiving written approval from HCDEH. All samples were analyzed for TPHg, BTXE, MTBE, and four (4) fuel-oxygenates (Tables 2 and 3). In addition,

groundwater samples were analyzed for TPHd and TPHmo. Laboratory analysis did not report any significant contamination in any of the soil samples, and elevated petroleum hydrocarbon concentrations (TPHg at 27,300 ppb) in the groundwater were limited to boring B-11 on the western margin of the site

### **3.6 2002-2005 Groundwater monitoring Program**

A quarterly groundwater-monitoring program was implemented on May 1, 2002, and is continuing at the present time. The program consists of recording water level data (Table 1) and collecting quarterly groundwater samples for laboratory analysis (Table 4). Water level data is used to input into a hydro-geologic modeling program that uses an inverse distance algorithm to generate groundwater elevation contour figures in order to track the direction of groundwater flow. Quarterly sampling events monitor hydrocarbon contamination levels in the groundwater beneath the site. Recent groundwater monitoring has reported petroleum hydrocarbons in wells MW-2, MW-3, MW-4, and MW-5, with the highest TPHg concentration in well MW-5. During the most recent monitoring events, no TPHg has been reported in wells MW-1 or MW-6; however, MTBE has been present in all wells.

## **4.0 SOIL CONTAMINATION ASSESSMENT PLAN**

At the current time, the actual source of the contamination has yet to be fully defined. To locate any sources that may be contributing mass to the dissolved phase hydrocarbon plume, and to assess the vertical and horizontal extent of soil contamination associated with the UST system located at Bigfoot Gas, SounPacific proposes the drilling and sampling of 18 soil borings (PB-19 through PB-36) along the trait of the facility's product lines (20 feet intervals), the dispensers, and around the USTs. All borings will be installed by the use of a truck-mounted direct-push Geoprobe® drill-rig. Proposed boring locations are shown on the proposed investigation map (Figure 6). Additional "step-out" borings may be installed contingent on field observations by the project scientist. SounPacific will obtain HCDEH approval if these field observations indicate the need for additional step-out borings will potentially exceed five (5). The results retrieved from these samples will be used in an attempt to locate the source(s) of contamination,

as requested by HCDEH. SounPacific staff will oversee this work.

## **4.1 Direct-Push Sampling Method**

Continuous core direct-push borings will be drilled by a State-licensed driller using hollow steel piping with an inner solid steel pipe. The system will be driven using a truck mounted hydraulic drill rig. Continuous core direct-push technology will be used to reach each continuous four-foot sample interval. Soil samples will be collected at a minimum of every four feet, lithologic changes, areas of obvious contamination, and just above groundwater for laboratory analysis. Soil samples will be visually inspected in the field, described, and screened for organic vapors. Soil samples will be inspected and documented by the project geologist for lithologic documentation of soil condition and classification using Unified Soil Classification System guidelines. The samples will be labeled, stored in appropriate sample containers, placed in coolers with ice, and kept at temperatures at or below 4° C for transportation under chain-of-custody to a State certified laboratory for analysis. All drilling and sample tailings will be contained in sealed D.O.T. 17E/17H 55-gallon drums and stored on site for disposal.

### **4.1.1 Soil Analytical Method**

All soil samples will be collected following the EPA guidelines for **SW 846 Method 5035** and analyzed for BTXE, MTBE and four fuel-oxygenates by **EPA Method 8260b**, and for TPHg, TPHd, and TPHmo by **EPA Method 8015**.

## **5.0 GROUNDWATER CONTAMINATION ASSESSMENT PLAN**

This phase of the hydrogeologic investigation will consist of collecting groundwater samples from all proposed borings (PB-19 through PB-40) (Figure 6) in an effort to collect data for modeling of the dissolved phase hydrocarbon plume. SounPacific also proposes that four (4) additional borings (PB-37 through PB-40) be drilled with the direct-push Geoprobe® drill-rig for the collection of groundwater samples to assist with the future placement of additional monitoring wells, and the defining of the lateral extent of the dissolved phase hydrocarbon plume. It should be noted that borings PB-37 through PB-40 are located on a public right-of-

way, and will require special permitting and traffic control. In addition to defining the extent of the groundwater contamination, groundwater samples will be collected from proposed boring PB-19 to investigate the extreme levels of TPHd contamination that was detected previously in boring B-17, and from boring PB-21 to evaluate the source of the groundwater contamination reported in borings B-14 and B-15.

## **5.1 Groundwater Sampling Method from Boreholes**

Groundwater samples will be collected from all 22 boreholes (PB-19 through PB-40). Samples will be collected from temporary well points that will be installed for water level measurements and sample collection. The temporary well points will be installed by placing a small diameter PVC screened well casing into the previously drilled soil boring. The temporary well casings will be removed within 72 hours and the boreholes will be grouted in accordance to industry standards. If the laboratory results indicate that groundwater contamination has migrated beyond the boring locations then additional borings will be requested in future workplans until the extent of groundwater contamination has been properly laterally defined.

### **5.1.1 Groundwater Analytical Methods**

All groundwater samples will be analyzed for BTXE, MTBE, four fuel-oxygenates, and lead scavengers by **EPA Method 8260b**, and for TPHg, TPHd, and TPHmo by **EPA Method 8015**.

## **6.0 SENSITIVE RECEPTOR SURVEY**

A sensitive receptor survey will be conducted within a 1,000-foot radius from the site. The survey will consist of file review at HCDEH, property owner information from Parcel Quest software, and a door-to-door survey of property owners in order to assess the locations of all domestic and/or industrial wells within the survey area. In addition, utility corridors will be located, and the positions of wetlands and surface water bodies will be determined by physical analysis of the surface topography. A report, including a map describing the survey results and an evaluation of possible conduits for contaminant transport, will be submitted following the survey.

## 7.0 SITE CONCEPTUAL MODEL

Two primary sources of contamination, the former 1,000-gallon kerosene UST and 2,000-gallon gasoline UST were removed in July of 1991. Soil samples (KE @ 6' and KW @ 6') collected from the kerosene UST excavation sidewalls were non-detect for TPHs (Table 3) and subsequent borings, drilled by Clearwater in 1995, in the vicinity of the kerosene UST location (SB-3 and SB-4, Figure 5) did not have any detectable levels of contamination. These analytical results indicated that there are no secondary, residual sources of contamination associated with the former kerosene UST.

Soil samples collected from the sidewalls of the former gasoline UST (PN @ 5'6" and PS @ 5'6") reported detectable levels of TPHg contamination (Table 3, Figure 5). These residual contaminants, after the removal of the gasoline UST, comprise a possible secondary source of contamination. Over time, surface water has infiltrated the soil and transported contaminants down to groundwater, where they have contributed mass to the dissolved hydrocarbon plume. Within the saturated zone, contaminants are transported via preferential pathways from the initial source. Based on monthly groundwater gradient measurements collected by SounPacific, between May 2002 and May 2005, we expect these contaminants to migrate to the west and northwest of the sources of contamination as well as follow preferential pathways such as utility trenches (Table 1, Figure 4).

At the time of the gasoline UST removal in July of 1991, two soil samples were also collected under the product lines (S-3 and S-1, Figure 5). In soil sample S-3, TPHg was detected at a concentration of 5,000 ppm at a depth of 1.5 feet bgs. In soil sample S-1, TPHg was detected at a concentration of 36 ppm at a depth of 1.5 feet bgs. SounPacific suspects that there may be another source originating from a release in the product lines, based on the difference in magnitude between the analytical results of these soil samples. Since sample S-3 has contamination that is two orders of magnitude greater than sample S-1, and because sample S-3 is farther away from the location of the former gasoline UST, SounPacific suspects that there may have been a release from the product line near the area of sample S-3. A release along the

product line would be a third primary source of contamination and needs to be investigated. It is assumed, according to our records that this product line still exists, although it may not be in use. If the product line where sample S-3 was procured is not in use, then the primary source would have been removed at the time that the product lines were discontinued. The remaining soil that surrounds the area of the possible release may still be acting as a secondary source of contamination.

In 1995, Clearwater drilled three (3) soil borings near the gasoline UST, removed in 1991 (Figure 5). Boring SB-1 was drilled in the area of the former excavation cavity and no constituents were detected in soil samples collected. Boring SB-2 had low levels of contamination, which was most likely left behind in the soil surrounding the UST excavation. However, TPHg concentrations in boring SB-1 ranged from 2,200 ppm at a depth of 5.5' to 5,600 ppm at a depth of 3' (Table 3, Figure 7). SounPacific feels the contamination detected in boring SB-1 indicates a product line release, which probably occurred during or immediately after the gasoline UST was removed. Since the TPHg concentrations detected in SB-1 were much higher than that of soil samples taken from the excavation walls, it is unlikely that this contamination was from residuals in the soil surrounding the former gasoline UST. Therefore, it is suspected that a release from the product line near boring SB-1 constitutes another secondary contamination source and needs to be further investigated. No groundwater samples were taken during this investigation.

During the 2000 SounPacific investigation, hydrocarbon contamination was detected in borings B-5 and B-10 in the soil at 0.5 feet bgs (Table 3, Figure 7). TPHd was the most concentrated constituent detected in boring B-5, which is inconsistent with contamination throughout the rest of the site. SounPacific was unable to procure samples below 0.5 feet bgs due to hand auger refusal. SounPacific has been unable to determine the source of this contamination with the available data. TPHg contamination in boring B-10 might possibly be due to a release from the product line or dispenser near the soil / cement interface, supported by analytical data from monitoring well MW-2 (Table 4). Contamination at this depth strongly suggests that the source may be a release from the dispenser. This would constitute another primary source and needs to be further investigated.

The 2002 SounPacific investigation, detected significant soil contamination in boring B-11 at a depth of four (4) feet bgs and in SB-14 at eight (8) feet (Table 3, Figure 7). There are several possibilities for the presence of this contamination. One possibility is that a release occurred from the newer USTs. The other possibilities are that release(s) are occurring along the product lines, and their trenches are acting as preferential pathways, which are enabling the migration of contamination in the soil down gradient from initial sources. In addition, the contamination associated with at location B-14 could be due to an older release associated with the historical tanks that were located at the south east corner of the property.

An exceptionally high concentration of TPHd was detected in the groundwater from boring B-17 (Table 2, Figure 5). Boring logs from the 2002 investigation stated that free product was floating on top of the groundwater in boreholes B-17 and B-18. SounPacific suggests that a laboratory error was made or sample integrity was compromised prior to the analysis of the groundwater sample collected from boring B-18 based on the lab reporting non-detectable results for all constituents tested in this particular sample. Soil samples were not analyzed for TPHd constituents. Therefore, SounPacific does have adequate data to determine where this contamination originated from or the extent of the groundwater plume. Therefore, SounPacific proposes further investigation in the area of borings B-16, B-17, and B-18 as is necessary for conclusions to be made. Proposed borings PB-19 and PB-20 are intended to assist in resolving this discrepancy as well as to further delineate contamination in the form of TPHd.

The majority of the soil contamination at the site appears to be confined to areas around possible releases, i.e. the product lines, and at depths above five (5) feet bgs. This supports the theory that the product line trenches are acting as preferential pathways. This residual soil contamination is found at depths that correlate with groundwater elevations throughout the year, which are generally measured between two (2) feet to four (4) feet bgs. Since the residual soil contamination is in contact with the groundwater surface, the soil contamination is leached into the groundwater and transported further down gradient from the source throughout the year. SounPacific feels that an analysis of the soil under the product lines would reveal further information that would allow further conclusions to be drawn and discussed in our site

conceptual model. Therefore, proposed borings PB-21 through PB-25, PB-31, and PB-32 are aimed at evaluating the product lines as pathways, and historical tank location. Proposed borings PB-26 through PB-30 are aimed at evaluating the dispensers as contamination sources. Proposed borings PB-33 through PB-36 are aimed at determining if there is a problem in the vicinity of the tank farm.

## 8.0 SITE SANITATION PROCEDURES

All drill cutting and groundwater extracted from wells and boreholes will be stored on site in D.O.T. 17E/17H 55-gallon drums. Laboratory analyses will be used to establish proper disposal procedures for cuttings and purge/development waters. Rinsate generated from steam cleaning drilling, development, and sampling equipment will be contained in a portable washbasin and pumped into 55-gallon drums for storage before disposal.

## 9.0 PROPOSED TIME SCHEDULE

The schedule for the proposed subsurface investigation at Bigfoot Gas is as follows:

- Once the *Workplan* approval has been received from HCDEH, a verbal pre-approval will be obtained from the USTCF
- Within two (2) weeks of approval of the *Workplan* and from the USTCF, subcontractors will be contracted and the *Workplan* implementation scheduled. It is expected that the field work will be completed within one (1) week.
- Within eight (8) weeks of completing the field work, a Report of Findings will be prepared and submitted to the HCDEH that includes formal tables, figures, boring logs and recommendations for further activities, if deemed necessary.

Project implementation dates are subject to agency approval, permitting, and equipment scheduling. If there is a deviation from the proposed schedule, all concerned parties will be notified at least five days before the proposed initiation. A three to four-day drilling program is expected. Formal laboratory results are expected four weeks after submitting samples, unless an accelerated time schedule is requested. The report of findings will encompass the field investigation, present findings, and recommendations regarding future activities at the site. In addition, all GeoTracker information will be submitted.



## CERTIFICATION

This Work Plan was prepared under the direct supervision of a California registered geologist at SounPacific. All information provided in this report including statements, conclusions and recommendations are based solely on field observations and analyses performed by a state-certified laboratory. SounPacific is not responsible for laboratory errors.

SounPacific promises to perform all its work in a manner used by members in similar professions working in the same geographic area. SounPacific will do whatever is reasonable to ensure that data collection is accurate. Please note however, that rain, buried utilities, and other factors can influence groundwater depths, directions, and other factors beyond what SounPacific could reasonably determine.

### SounPacific

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## **Tables & Chart**

**Table 1**  
**Water Levels**

Bigfoot Gas  
2801 Central Avenue  
McKinleyville, California 95519

Sample Location	Date	Depth to Bottom/ Feet BGS	Survey Height/ Feet Above MSL	Depth to Water/ Feet BGS	Adjusted Elevation/ Feet Above MSL
MW-1	5/1/2002	11.66	111.57	1.54	110.03
	5/30/2002	11.67	111.57	2.43	109.14
	7/3/2002	11.63	111.57	2.65	108.92
	8/3/2002	11.62	111.57	3.40	108.17
	9/4/2002	11.64	111.57	3.90	107.67
	10/4/2002	11.70	111.57	4.25	107.32
	11/4/2002	11.65	111.57	4.36	107.21
	12/2/2002	12.63	111.57	3.61	107.96
	1/6/2003	11.66	111.57	1.22	110.35
	2/5/2003	11.67	111.57	1.31	110.26
	3/7/2003	11.67	111.57	1.67	109.90
	4/8/2003	11.67	111.57	1.00	110.57
	5/12/2003	11.67	111.57	1.32	110.25
	8/2/2003	11.88	111.57	3.11	108.46
	11/8/2003	11.88	111.57	2.57	109.00
	2/5/2004	11.88	111.57	1.21	110.36
	5/4/2004	11.88	111.57	2.03	109.54
	8/9/2004	11.82	111.57	3.71	107.86
	11/5/2004	11.83	111.57	2.08	109.49
	2/6/2005	11.83	111.57	1.65	109.92
	5/13/2005	11.81	111.57	1.32	110.25
MW-2	5/1/2002	12.00	113.03	2.75	110.28
	5/30/2002	11.85	113.03	3.63	109.40
	7/3/2002	11.87	113.03	4.20	108.83
	8/3/2002	11.87	113.03	4.68	108.35
	9/4/2002	11.87	113.03	5.22	107.81
	10/4/2002	9.71	113.03	5.64	107.39
	11/4/2002	11.82	113.03	5.67	107.36
	12/2/2002	11.83	113.03	4.83	108.20
	1/6/2003	11.86	113.03	2.46	110.57
	2/5/2003	10.22	113.03	2.52	110.51
	3/7/2003	11.72	113.03	2.71	110.32
	4/8/2003	11.72	113.03	2.22	110.81
	5/12/2003	11.72	113.03	2.53	110.50
	8/2/2003	11.98	113.03	4.31	108.72
	11/8/2003	11.98	113.03	3.95	109.08
	2/5/2004	11.98	113.03	2.44	110.59
	5/4/2004	11.98	113.03	3.24	109.79
	8/9/2004	11.97	113.03	5.07	107.96
	11/5/2004	12.04	113.03	3.26	109.77
	2/6/2005	12.04	113.03	2.79	110.24
	5/13/2005	9.12	113.03	2.57	110.46

**Table 1 (cont.)****Water Levels**

Bigfoot Gas

2801 Central Avenue

McKinleyville, Californian 95519

Sample Location	Date	Depth to Bottom/ Feet BGS	Survey Height/ Feet Above MSL	Depth to Water/ Feet BGS	Adjusted Elevation/ Feet Above MSL
MW-3	5/1/2002	11.39	112.13	2.15	109.98
	5/30/2002	11.24	112.13	2.94	109.19
	7/3/2002	11.25	112.13	3.41	108.72
	8/3/2002	11.24	112.13	3.84	108.29
	9/4/2002	11.21	112.13	4.32	107.81
	10/4/2002	11.22	112.13	4.69	107.44
	11/4/2002	11.22	112.13	4.83	107.30
	12/2/2002	11.23	112.13	4.02	108.11
	1/6/2003	11.25	112.13	1.91	110.22
	2/5/2003	11.25	112.13	2.00	110.13
	3/7/2003	11.29	112.13	2.30	109.83
	4/8/2003	11.29	112.13	1.69	110.44
	5/12/2003	11.29	112.13	1.99	110.14
	8/2/2003	11.46	112.13	3.57	108.56
	11/8/2003	11.46	112.13	3.00	109.13
	2/5/2004	11.46	112.13	1.91	110.22
	5/4/2004	11.46	112.13	2.61	109.52
	8/9/2004	11.46	112.13	4.14	107.99
	11/5/2004	11.40	112.13	2.67	109.46
	2/6/2005	11.40	112.13	2.30	109.83
	5/13/2005	11.42	112.13	1.98	110.15
MW-4	5/1/2002	11.34	112.76	2.44	110.32
	5/30/2002	11.14	112.76	3.28	109.48
	7/3/2002	11.11	112.76	3.84	108.92
	8/3/2002	11.14	112.76	4.32	108.44
	9/4/2002	11.12	112.76	4.86	107.90
	10/4/2002	11.12	112.76	5.24	107.52
	11/4/2002	11.05	112.76	5.36	107.40
	12/2/2002	11.08	112.76	4.51	108.25
	1/6/2003	11.05	112.76	2.04	110.72
	2/5/2003	11.06	112.76	2.17	110.59
	3/7/2003	11.24	112.76	2.51	110.25
	4/8/2003	11.24	112.76	1.69	111.07
	5/12/2003	11.24	112.76	3.14	109.62
	8/2/2003	11.32	112.76	4.03	108.73
	11/8/2003	11.32	112.76	3.31	109.45
	2/5/2004	11.32	112.76	2.03	110.73
	5/4/2004	11.32	112.76	2.85	109.91
	8/9/2004	11.32	112.76	4.64	108.12
	11/5/2004	11.20	112.76	2.87	109.89
	2/6/2005	11.27	112.76	2.51	110.25
	5/13/2005	11.24	112.76	2.14	110.62

**Table 1 (cont.)**  
**Water Levels**  
 Bigfoot Gas  
 2801 Central Avenue  
 McKinleyville, California 95519

Sample Location	Date	Depth to Bottom/ Feet BGS	Survey Height/ Feet Above MSL	Depth to Water/ Feet BGS	Adjusted Elevation/ Feet Above MSL
MW-5	5/1/2002	11.10	112.62	1.43	111.19
	5/30/2002	11.11	112.62	2.71	109.91
	7/3/2002	11.12	112.62	3.31	109.31
	8/3/2002	11.14	112.62	3.85	108.77
	9/4/2002	11.12	112.62	4.37	108.25
	10/4/2002	11.15	112.62	4.85	107.77
	11/4/2002	11.15	112.62	4.97	107.65
	12/2/2002	11.13	112.62	4.02	108.60
	1/6/2003	11.15	112.62	1.11	111.51
	2/5/2003	11.18	112.62	1.23	111.39
	3/7/2003	11.15	112.62	1.70	110.92
	4/8/2003	11.15	112.62	0.95	111.67
	5/12/2003	11.15	112.62	1.33	111.29
	8/2/2003	11.36	112.62	3.53	109.09
	11/8/2003	11.36	112.62	2.67	109.95
	2/5/2004	11.36	112.62	1.10	111.52
	5/4/2004	11.36	112.62	2.18	110.44
	8/9/2004	11.35	112.62	4.17	108.45
	11/5/2004	11.34	112.62	2.19	110.43
	2/6/2005	11.32	112.62	1.62	111.00
	5/13/2005	11.30	112.62	1.24	111.38
MW-6	5/1/2002	10.92	112.38	2.31	110.07
	5/30/2002	10.91	112.38	3.13	109.25
	7/3/2002	10.91	112.38	3.64	108.74
	8/3/2002	10.92	112.38	4.09	108.29
	9/4/2002	10.93	112.38	4.61	107.77
	10/4/2002	10.96	112.38	4.99	107.39
	11/4/2002	10.92	112.38	5.05	107.33
	12/2/2002	10.93	112.38	4.27	108.11
	1/6/2003	10.93	112.38	2.05	110.33
	2/5/2003	10.95	112.38	2.14	110.24
	3/7/2003	10.95	112.38	2.46	109.92
	4/8/2003	10.95	112.38	1.82	110.56
	5/12/2003	10.95	112.38	3.12	109.26
	8/2/2003	11.13	112.38	3.81	108.57
	11/8/2003	11.13	112.38	3.03	109.35
	2/5/2004	11.13	112.38	2.07	110.31
	5/4/2004	11.13	112.38	2.75	109.63
	8/9/2004	11.18	112.38	4.39	107.99
	11/5/2004	11.03	112.38	2.76	109.62
	2/6/2005	11.04	112.38	2.44	109.94
	5/13/2005	10.95	112.38	2.06	110.32

Notes:

Bgs: Below Ground Surface

MSL: Mean Sea Level

**Table 2**  
**Groundwater Analytical Results**  
 Bigfoot Gas  
 2801 Central Avenue  
 McKinleyville, California 95519

Sample ID	Sample Location	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Ethylbenzene (ppb)	MTBE (ppb)	DIPE (ppb)	TAME (ppb)	ETBE (ppb)	TBA (ppb)	TPHd (ppb)	TPHmo (ppb)	TPHs (ppb)	Methanol (ppb)	Ethanol (ppb)	Dissolved Pb (ppb)
TP-1	Test Pit #1	5/8/1991	----	----	----	----	----	----	----	----	----	----	ND < 50	----	----	----	----	----
TP-2	Test Pit #2	5/8/1991	ND < 50	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	----	----	----	----	----	----	----	----	----	----
TP-3	Test Pit #3	5/8/1991	----	----	----	----	----	----	----	----	----	----	----	----	ND < 50	----	----	----
Premium	Premium	7/11/1991	<b>320,000</b>	<b>19,000</b>	<b>54,000</b>	<b>52,000</b>	<b>4,800</b>	----	----	----	----	----	----	----	----	----	----	----
Kerosene	Kerosene	7/11/1991	----	----	----	----	----	----	----	----	----	----	----	----	<b>1,500</b>	----	----	----
SPBFB-1	B-1	9/20/2000	ND < 50	ND < 0.50	ND < 0.50	<b>2.8</b>	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 5.0	----	----	----	ND < 50	<b>22</b>	ND < 20
SPBFB-2	B-2	9/20/2000	ND < 50	ND < 0.50	ND < 0.50	<b>3.4</b>	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 5.0	----	----	----	ND < 50	<b>70</b>	ND < 20
SPBFB-3	B-3	9/20/2000	ND < 50	ND < 0.50	ND < 0.50	<b>1.2</b>	ND < 0.50	<b>0.54</b>	ND < 0.50	ND < 0.50	ND < 0.50	ND < 5.0	----	----	----	<b>82</b>	<b>110</b>	ND < 20
SPBFB-6	B-6	9/20/2000	ND < 50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	<b>1.0</b>	ND < 0.50	ND < 0.50	ND < 0.50	ND < 5.0	----	----	----	ND < 50	ND < 5.0	ND < 20
SPBFB-7	B-7	9/20/2000	<b>6,400</b>	<b>660</b>	<b>110</b>	<b>440</b>	<b>380</b>	<b>260</b>	ND < 2.0	<b>4.0</b>	ND < 2.0	<b>67</b>	----	----	----	ND < 200	ND < 20	ND < 20
SPBFB-8	B-8	9/20/2000	<b>140</b>	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	<b>580</b>	ND < 0.50	<b>85</b>	ND < 0.50	ND < 5.0	----	----	----	ND < 50	ND < 5.0	ND < 20
SPBFB-9	B-9	9/20/2000	ND < 50	ND < 0.50	ND < 0.50	ND < 0.50	ND < 0.50	<b>180</b>	ND < 0.50	<b>9.9</b>	ND < 0.50	<b>26</b>	----	----	----	ND < 50	<b>16</b>	ND < 20
SPBFB-10	B-10	9/20/2000	<b>990</b>	<b>210</b>	<b>3.8</b>	<b>3.2</b>	<b>13</b>	<b>380</b>	ND < 0.50	ND < 0.50	<b>5.4</b>	<b>7.6</b>	----	----	----	ND < 50	ND < 20	ND < 20
SBGW-11	B-11	4/22/2002	<b>27,300</b>	<b>656</b>	<b>5,440</b>	<b>6,280</b>	<b>715</b>	<b>1,610</b>	ND < 0.5	<b>255</b>	ND < 0.5	ND < 50	<b>1,250</b>	ND < 50	----	----	----	----
SBGW-13	B-13	4/22/2002	ND < 50	ND < 0.3	<b>0.5</b>	<b>1.1</b>	ND < 0.3	ND < 2.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50	ND < 50	ND < 50	----	----	----	----
SBGW-14	B-14	4/22/2002	<b>165</b>	<b>104</b>	<b>0.6</b>	<b>1</b>	ND < 0.3	ND < 2.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50	ND < 50	ND < 50	----	----	----	----
SBGW-15	B-15	4/22/2002	<b>263</b>	ND < 0.3	<b>5.3</b>	<b>24.5</b>	<b>1.8</b>	ND < 2.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50	ND < 50	ND < 50	----	----	----	----
SBGW-16	B-16	4/22/2002	ND < 50	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	ND < 2.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50	ND < 50	ND < 50	----	----	----	----
SBGW-17	B-17	4/22/2002	ND < 25,000	ND < 150	ND < 150	ND < 300	ND < 150	ND < 1,000	ND < 250	ND < 250	ND < 250	ND < 25,000	<b>298,000</b>	ND < 50	----	----	----	----
SBGW-18	B-18	4/22/2002	ND < 50	ND < 0.3	<b>1.0</b>	<b>2.6</b>	ND < 0.3	<b>2.1</b>	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50	ND < 50	ND < 50	----	----	----	----

notes:

TPHg: Total petroleum hydrocarbons as gasoline.

MTBE: Methyl tertiary butyl ether

DIPE: Diisopropyl Ether

TAME: Tertiary amyl methyl ether

ETBE: Ethyl tertiary butyl ether

TPHd: Total petroleum hydrocarbons as diesel

TPHmo: Total petroleum hydrocarbons as motor oil

TBA: Tertiary butanol

TPHs: Total petroleum hydrocarbons as solvent

ppb: parts per billion = µg/l = .001 mg/l = 0.001 ppm.

ND: Not detected at or below the method detection limit as shown.

**Table 3**  
**Soil Analytical Results**  
Bigfoot Gas  
2801 Central Avenue  
McKinleyville, California 95519

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	DIPE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	TPHs (ppm)	Lead (ppm)
W-1	BF West #1	6/18/1991	3	ND < 0.005	0.0067	0.049	ND < 0.005	----	----	----	----	----	----	----	----
W-2	BF West #2	6/18/1991	1.6	ND < 0.005	0.0067	0.02	ND < 0.005	----	----	----	----	----	----	----	----
E-1	BF East #1	6/27/1991	130	0.16	0.93	ND < 2.0	ND < 2.0	----	----	----	----	----	----	----	----
E-2	BF East #2	6/27/1991	210	1.9	17	20	3.4	----	----	----	----	----	----	----	----
E-3	BF East #3	6/27/1991	8	0.12	0.15	0.22	0.057	----	----	----	----	----	----	----	----
S-1	BF South #1	6/27/1991	88	0.062	0.18	0.34	0.065	----	----	----	----	----	----	----	----
PN @ 5'6"	Premium North	7/11/1991	7	0.049	0.0800	0.210	0.074	----	----	----	----	----	----	----	----
PS @ 5'6"	Premium South	7/11/1991	350	ND < 0.50	2.6	12.00	1.5	----	----	----	----	----	----	----	----
S-1 @ 1'6"	South #1	7/11/1991	36	0.0099	0.075	0.15	0.026	----	----	----	----	----	----	----	----
S-3 @ 1'6"	South #3	7/11/1991	5,000	14	280	510	96	----	----	----	----	----	----	----	----
KE @ 6'	Kerosene East	7/11/1991	----	----	----	----	----	----	----	----	----	----	----	ND < 1.0	----
KW @ 6'	KeroseneWest	7/11/1991	----	----	----	----	----	----	----	----	----	----	----	ND < 1.0	----
B-1 @ 3.5'	B-1	3/22/1995	ND < 1	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----	----	----	----	----	ND < 1.0
B-1 @ 5.5'	B-1	3/22/1995	ND < 1	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----	----	----	----	----	ND < 1.0
SB-1A @ 1.5 '	SB-1	11/7/1995	4,200	ND < 1	49	370	27	----	----	----	----	----	----	----	----
SB-1B @ 3'	SB-1	11/7/1995	5,600	ND < 2	97	590	59	----	----	----	----	----	----	----	----
SB-1C @ 5.5'	SB-1	11/7/1995	2,200	0.91	55	240	24	----	----	----	----	----	----	----	----
SB-2A @ 3'	SB-2	11/7/1995	ND < 1	ND < 0.005	ND < 0.005	ND < 0.02	ND < 0.005	----	----	----	----	----	----	----	----
SB-2B @ 7.5'	SB-2	11/7/1995	23	0.15	0.014	0.220	0.1200	----	----	----	----	----	----	----	----
SB-3A @ 2'	SB-3	11/7/1995	ND < 0.2	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	----	----	----	----	----	ND < 1	ND < 1	----
SB-4A @ 2'	SB-4	11/7/1995	ND < 1	ND < 0.005	ND < 0.005	ND < 0.02	ND < 0.005	----	----	----	----	----	ND < 1	ND < 1	----
SPBFB-1 @ 5'	B-1	9/20/2000	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.050	----	----	----	----	----	----	----
SPBFB-1 @ 10'	B-1	9/20/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	----	----	----
SPBFB-2 @ 5'	B-2	9/20/2000	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.050	----	----	----	----	----	----	----
SPBFB-2 @ 9'	B-2	9/20/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	----	----	----
SPBFB-3 @ 5'	B-3	9/20/2000	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.050	----	----	----	----	----	----	----
SPBFB-3 @ 10'	B-3	9/20/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	----	----	----
SPBFB-5 @ 6"	B-5	9/20/2000	22	ND < 0.0050	0.0096	0.077	0.0090	ND < 0.050	----	----	----	----	2,900	----	----
SPBFB-6 @ 5'	B-6	9/20/2000	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.050	----	----	----	----	----	----	----
SPBFB-6 @ 7'	B-6	9/20/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	----	----	----
SPBFB-7 @ 5'	B-7	9/20/2000	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.050	----	----	----	----	----	----	----
SPBFB-7 @ 7.4'	B-7	9/20/2000	ND < 1.0	0.0061	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	----	----	----
SPBFB-8 @ 5'	B-8	9/20/2000	ND < 1.0	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0050	0.15	----	----	----	----	----	----	----

**Table 3 (cont.)**  
**Soil Analytical Results**  
 Bigfoot Gas  
 2801 Central Avenue  
 McKinleyville, California 95519

Sample ID	Sample Location	Sample Date	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Xylenes (ppm)	Ethylbenzene (ppm)	MTBE (ppm)	DIPE (ppm)	TAME (ppm)	ETBE (ppm)	TBA (ppm)	TPHd (ppm)	TPHs (ppm)	Lead (ppm)
SPBFB-8 @ 7.5'	B-8	9/20/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	----	----	----
SPBFB-9 @ 10'	B-9	9/20/2000	ND < 1.0	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	----	----	----
SPBFB-10 @ 5'	B-10	9/20/2000	<b>1.1</b>	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.0050	ND < 0.050	----	----	----	----	----	----	----
SPBFB-10 @ 6"	B-10	9/20/2000	<b>1,400</b>	ND < 1.0	ND < 15	ND < 12	ND < 12	ND < 3.0	----	----	----	----	----	----	----
SPBFB-10 @ 9'	B-10	9/20/2000	ND < 1.0	<b>0.014</b>	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.050	----	----	----	----	----	----	----
SB-11 @ 4'	B-11	4/22/2002	<b>2.342</b>	<b>0.068</b>	<b>0.447</b>	<b>0.995</b>	<b>0.116</b>	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-13 @ 4'	B-13	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-13 @ 8'	B-13	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-13 @ 12'	B-13	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-14 @ 4'	B-14	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-14 @ 8'	B-14	4/22/2002	<b>1.99</b>	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-14 @ 12'	B-14	4/22/2002	<b>0.625</b>	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-15 @ 4'	B-15	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-15 @ 8'	B-15	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-15 @ 12'	B-15	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-16 @ 4'	B-16	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-16 @ 8'	B-16	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-16 @ 12'	B-16	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-17 @ 4'	B-17	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	<b>0.023</b>	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-17 @ 8'	B-17	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	<b>0.007</b>	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-17 @ 12'	B-17	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-18 @ 4'	B-18	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-18 @ 8'	B-18	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----
SB-18 @ 12'	B-18	4/22/2002	ND < 0.060	ND < 0.005	ND < 0.005	ND < 0.015	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 0.005	ND < 5	----	----	----

Notes:

TPHg: Total petroleum hydrocarbons as gasoline

MTBE: Methyl tertiary butyl ether

TAME: Tertiary amyl methyl ether

DIPE: Diisopropyl ether

TPHs: Total petroleum hydrocarbons as solvent

ETBE: Ethyl tertiary butyl ether

TBA: Tertiary butanol

ppm: parts per million = µg/g = mg/kg = 1000µg/kg.

ND: Not detected at or below the method detection limit as shown.



**Table 4**  
**Groundwater Analytical Results from Monitoring Wells**

Bigfoot Gas  
2801 Central Avenue  
McKinleyville, California 95519

Sample Location	Sample Event	Annual Quarter	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Ethylbenzene (ppb)	MTBE (ppb)	DIPE (ppb)	TAME (ppb)	ETBE (ppb)	TBA (ppb)	TPHd (ppb)	TPHmo (ppb)	EDC (ppb)	EDB (ppb)
MW-1	Well Installation	2nd Quarter	5/1/2002	ND < 50	ND < 0.3	<b>0.3</b>	ND < 0.6	ND < 0.3	<b>10.5</b>	ND < 0.5	ND < 0.5	ND < 0.5	ND < 100	ND < 50	ND < 50	NT	NT
	1st Quarterly	3rd Quarter	8/3/2002	<b>91</b>	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	<b>114</b>	ND < 0.5	<b>7.5</b>	ND < 0.5	ND < 100	ND < 50	ND < 50	NT	NT
	2nd Quarterly	4th Quarter	11/4/2002	<b>90.4</b>	ND < 0.3	ND < 0.3	ND < 0.6	ND < 0.3	<b>94.7</b>	ND < 0.5	<b>7.6</b>	ND < 0.5	ND < 100	ND < 50	ND < 50	ND < 0.5	ND < 0.5
	3rd Quarterly	1st Quarter	2/5/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50	ND < 50	ND < 500	ND < 0.5	ND < 0.5
	4th Quarterly	2nd Quarter	5/12/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50	ND < 50	ND < 500	ND < 0.5	ND < 0.5
	5th Quarterly	3rd Quarter	8/2/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	<b>23</b>	ND < 0.5	<b>1.0</b>	ND < 0.5	ND < 50	ND < 50	ND < 500	ND < 0.5	ND < 0.5
	6th Quarterly	4th Quarter	11/8/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	<b>88</b>	ND < 0.5	<b>3.5</b>	ND < 0.5	ND < 50	ND < 50	ND < 500	ND < 0.5	ND < 0.5
	7th Quarterly	1st Quarter	2/5/2004	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	<b>0.5</b>	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50	ND < 50	ND < 500	ND < 0.5	ND < 0.5
	8th Quarterly	2nd Quarter	5/4/2004	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	<b>0.5</b>	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50	ND < 50	ND < 500	ND < 0.5	ND < 0.5
	9th Quarterly	3rd Quarter	8/9/2004	ND < 50	ND < 0.5	ND < 0.5	ND < 1.5	ND < 0.5	<b>34.0</b>	ND < 0.5	<b>1.2</b>	ND < 0.5	ND < 50	<b>160</b>	ND < 500	ND < 0.5	ND < 0.5
	10th Quarterly	4th Quarter	11/5/2004	ND < 50	ND < 0.5	ND < 0.5	ND < 1.5	ND < 0.5	<b>14</b>	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50	ND < 50	ND < 500	ND < 0.5	ND < 0.5
	11th Quarterly	1st Quarter	2/6/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50.0	ND < 50	ND < 50	----	----
	12th Quarterly	2nd Quarter	5/13/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	ND < 1.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50.0	ND < 50	ND < 50	----	----
MW-2	Well Installation	2nd Quarter	5/1/2002	<b>498</b>	ND < 0.3	ND < 0.3	<b>3.9</b>	<b>1.3</b>	<b>1,380</b>	ND < 0.5	<b>552</b>	ND < 0.5	ND < 100	ND < 50	ND < 50	NT	NT
	1st Quarterly	3rd Quarter	8/3/2002	<b>8,870</b>	<b>15.7</b>	<b>0.5</b>	<b>3.9</b>	<b>2.2</b>	<b>8,160</b>	ND < 0.5	<b>3,460</b>	ND < 0.5	ND < 100	ND < 50	ND < 50	NT	NT
	2nd Quarterly	4th Quarter	11/4/2002	<b>674</b>	<b>28.3</b>	ND < 0.3	ND < 0.6	ND < 0.3	<b>1,130</b>	ND < 0.5	<b>526</b>	ND < 0.5	ND < 50	ND < 50	ND < 50	ND < 0.5	ND < 0.5
	3rd Quarterly	1st Quarter	2/5/2003	<b>1,200</b>	<b>0.5</b>	ND < 0.5	ND < 1	ND < 0.5	<b>1,900</b>	ND < 0.5	<b>800</b>	<b>4.9</b>	<b>690</b>	ND < 50	ND < 500	ND < 0.5	ND < 0.5
	4th Quarterly	2nd Quarter	5/12/2003	<b>540</b>	ND < 50	ND < 50	ND < 100	ND < 50	<b>730</b>	ND < 50	<b>140</b>	ND < 50	ND < 500	ND < 50	ND < 500	ND < 50	ND < 50
	5th Quarterly	3rd Quarter	8/2/2003	ND < 5,000	ND < 50	ND < 50	ND < 100	ND < 50	<b>1,200</b>	ND < 50	<b>430</b>	ND < 50	ND < 500	ND < 500	ND < 500	ND < 50	ND < 50
	6th Quarterly	4th Quarter	11/8/2003	<b>790</b>	ND < 50	ND < 50	ND < 100	ND < 50	<b>4,200</b>	ND < 50	<b>1,800</b>	ND < 50	ND < 500	<b>150</b>	ND < 500	ND < 50	ND < 50
	7th Quarterly	1st Quarter	2/5/2004	<b>440</b>	ND < 50	<b>85</b>	<b>120</b>	ND < 50	<b>1,700</b>	ND < 50	<b>860</b>	ND < 50	ND < 500	<b>93</b>	ND < 500	ND < 50	ND < 50
	8th Quarterly	2nd Quarter	5/4/2004	<b>1,300</b>	ND < 50	ND < 50	ND < 10.0	ND < 50	<b>1,200</b>	ND < 50	<b>530</b>	ND < 50	ND < 500	<b>190</b>	ND < 500	ND < 50	ND < 50
	9th Quarterly	3rd Quarter	8/9/2004	<b>1,900</b>	ND < 50	ND < 50	ND < 15.0	ND < 50	<b>2,700</b>	ND < 50	<b>1,100</b>	<b>7.2</b>	<b>730</b>	<b>420</b>	ND < 500	ND < 50	ND < 50
	10th Quarterly	4th Quarter	11/5/2004	<b>1,400</b>	<b>5.8</b>	ND < 50	ND < 15.0	ND < 50	<b>970</b>	ND < 50	<b>460</b>	ND < 50	<b>230</b>	<b>160</b>	ND < 500	ND < 50	ND < 50
	11th Quarterly	1st Quarter	2/6/2005	<b>1,230</b>	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	<b>1,170</b>	ND < 0.5	<b>504</b>	<b>3.6</b>	<b>279</b>	<b>208</b>	<b>166</b>	----	----
	12th Quarterly	2nd Quarter	5/13/2005	<b>658</b>	ND < 2.0	ND < 2.0	ND < 4.0	ND < 2.0	<b>533</b>	ND < 2.0	<b>241</b>	ND < 2.0	ND < 200	<b>136</b>	<b>120</b>	----	----
MW-3	Well Installation	2nd Quarter	5/1/2002	<b>102</b>	<b>2.9</b>	ND < 0.3	<b>5.0</b>	<b>0.8</b>	<b>153</b>	ND < 0.5	<b>46.3</b>	ND < 0.5	ND < 100	ND < 50	ND < 50	NT	NT
	1st Quarterly	3rd Quarter	8/3/2002	<b>8,260</b>	<b>383</b>	<b>145</b>	<b>1,970</b>	<b>420</b>	<b>4,000</b>	ND < 0.5	<b>1,580</b>	ND < 0.5	ND < 100	<b>916</b>	ND < 50	NT	NT
	2nd Quarterly	4th Quarter	11/4/2002	<b>537</b>	<b>30.8</b>	<b>0.7</b>	<b>39.5</b>	<b>24.9</b>	<b>928</b>	ND < 0.5	<b>358</b>	ND < 0.5	ND < 50	ND < 50	ND < 50	ND < 0.5	ND < 0.5
	3rd Quarterly	1st Quarter	2/5/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	<b>100</b>	ND < 0.5	<b>27</b>	ND < 0.5	<b>17</b>	ND < 50	ND < 500	<b>1.6</b>	ND < 0.5
	4th Quarterly	2nd Quarter	5/12/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	<b>28</b>	ND < 0.5	<b>5.5</b>	ND < 0.5	ND < 50	ND < 50	ND < 500	<b>1.2</b>	ND < 0.5
	5th Quarterly	3rd Quarter	8/2/2003	<b>6,400</b>	<b>75</b>	ND < 50	<b>1,000</b>	<b>460</b>	<b>1,200</b>	ND < 50	<b>540</b>	ND < 50	<b>530</b>	ND < 50	ND < 500	ND < 50	ND < 50
	6th Quarterly	4th Quarter	11/8/2003	<b>52</b>	ND < 0.5	ND < 0.5	<b>1.2</b>	<b>0.5</b>	<b>120</b>	ND < 0.5	<b>68</b>	ND < 0.5	ND < 50	ND < 50	ND < 500	ND < 0.5	ND < 0.5
	7th Quarterly	1st Quarter	2/5/2004	ND < 50	ND < 0.5	ND < 0.5	ND < 1	ND < 0.5	<b>40</b>	ND < 0.5	<b>9.4</b>	ND < 0.5	ND < 50	ND < 50	ND < 500	<b>0.9</b>	ND < 0.5
	8th Quarterly	2nd Quarter	5/4/2004	<b>82</b>	ND < 0.5	ND < 0.5	<b>0.5</b>	ND < 0.5	<b>57</b>	ND < 0.5	<b>32</b>	ND < 0.5	ND < 50	<b>55</b>	ND < 500	ND < 0.5	ND < 0.5
	9th Quarterly	3rd Quarter	8/9/2004	<b>970</b>	<b>6.0</b>	ND < 0.5	ND < 1.5	<b>3.6</b>	<b>1,500</b>	ND < 0.5	<b>530</b>	ND < 0.5	<b>90</b>	<b>250</b>	ND < 500	<b>1.5</b>	ND < 0.5
	10th Quarterly	4th Quarter	11/5/2004	<b>100</b>	ND < 0.5	ND < 0.5	ND < 1.5	ND < 0.5	<b>63</b>	ND < 0.5	<b>19</b>	ND < 0.5	ND < 50	<b>240</b>	ND < 500	ND < 0.5	ND < 0.5
	11th Quarterly	1st Quarter	2/6/2005	<b>183</b>	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	<b>172</b>	ND < 0.5	<b>56.1</b>	ND < 0.5	ND < 50	<b>51</b>	<b>95</b>	----	----
	12th Quarterly	2nd Quarter	5/13/2005	<b>183</b>	ND < 1.2	ND < 1.2	ND < 2.5	ND < 1.2	<b>163</b>	ND < 1.2	<b>52.6</b>	ND < 1.2	ND < 125	<b>70</b>	<b>84</b>	----	----

TPHg: Total petroleum hydrocarbons as gasoline

MTBE: Methyl tertiary butyl ether

DIPE: Diisopropyl ether

TAME: Tertiary amyl methyl ether

TPHd: Total petroleum hydrocarbons as diesel

NT: Not tested.

TBA: Tertiary butanol

ETBE: Ethyl tertiary butyl ether

TPHmo: Total petroleum hydrocarbons as motor oil

ppb: parts per billion = µg/l = .001 mg/l = 0.001 ppm.

ND: Not detected. Sample was detected at or below the method detection limit as shown.

**Table 4 (cont.)**  
**Groundwater Analytical Results from Monitoring Wells**  
 Bigfoot Gas  
 2801 Central Avenue  
 McKinleyville, California 95519

Sample Location	Sample Event	Annual Quarter	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Xylenes (ppb)	Ethylbenzene (ppb)	MTBE (ppb)	DIPE (ppb)	TAME (ppb)	ETBE (ppb)	TBA (ppb)	TPHd (ppb)	TPHmo (ppb)	EDC (ppb)	EDB (ppb)
MW-4	Well Installation	2nd Quarter	5/1/2002	7,970	157	356	1,270	483	ND < 20	ND < 5	ND < 5	ND < 5	ND < 1,000	489	ND < 50	NT	NT
	1st Quarterly	3rd Quarter	8/3/2002	9,150	193	720	2,430	1,080	53	ND < 15	ND < 15	ND < 15	ND < 5,000	2,770	ND < 50	NT	NT
	2nd Quarterly	4th Quarter	#####	6,090	207	343	712	530	ND < 2.0	ND < 0.5	ND < 0.5	ND < 0.5	ND < 50	159	ND < 50	ND < 0.5	ND < 0.5
	3rd Quarterly	1st Quarter	2/5/2003	20,000	170	120	890	600	ND < 5.0	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	2,000	ND < 500	ND < 5.0	ND < 5.0
	4th Quarterly	2nd Quarter	#####	6,200	96	77	248	220	ND < 50	ND < 50	ND < 50	ND < 50	ND < 500	680	ND < 500	ND < 50	ND < 50
	5th Quarterly	3rd Quarter	8/2/2003	7,700	130	59	406	470	31	ND < 5.0	20	ND < 5.0	ND < 50	ND < 50	ND < 500	ND < 5.0	ND < 5.0
	6th Quarterly	4th Quarter	#####	7,900	260	190	385	480	56	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	500	ND < 500	ND < 5.0	ND < 5.0
	7th Quarterly	1st Quarter	2/5/2004	7,600	180	110	334	460	29	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	ND < 50	ND < 500	ND < 5.0	ND < 5.0
	8th Quarterly	2nd Quarter	5/4/2004	8,000	130	140	504	420	19	ND < 5.0	ND < 5.0	ND < 5.0	ND < 50	1,300	ND < 500	ND < 5.0	ND < 5.0
	9th Quarterly	3rd Quarter	8/9/2004	5,600	120	44	302	360	67	ND < 5.0	13	ND < 5.0	ND < 50	850	ND < 500	ND < 5.0	ND < 5.0
	10th Quarterly	4th Quarter	#####	58	1.0	ND < 0.5	ND < 1.5	ND < 0.5	6.7	ND < 0.5	2.8	ND < 0.5	ND < 5.0	120	ND < 500	ND < 0.5	ND < 0.5
	11th Quarterly	1st Quarter	2/6/2005	6,230	83.5	120	602	343	11.5	ND < 2.0	ND < 2.0	ND < 2.0	ND < 200	729	121	----	----
	12th Quarterly	2nd Quarter	#####	3,950	31.4	80.4	493	193	ND < 5.0	ND < 2.5	ND < 2.5	ND < 2.5	ND < 250	708	106	----	----
MW-5	Well Installation	2nd Quarter	5/1/2002	63,800	ND < 150	1,270	19,500	1,720	ND < 1,000	ND < 250	ND < 250	ND < 250	ND < 50,000	4,420	396	NT	NT
	1st Quarterly	3rd Quarter	8/3/2002	30,500	ND < 15	486	17,700	1,760	ND < 25	ND < 15	ND < 15	ND < 15	ND < 5,000	9,630	ND < 50	NT	NT
	2nd Quarterly	4th Quarter	#####	81,000	789	ND < 300	24,600	3,710	2,330	ND < 500	1,570	ND < 500	ND < 100,000	3,870	ND < 50	ND < 500	ND < 500
	3rd Quarterly	1st Quarter	2/5/2003	78,000	51	1,600	16,800	1,600	ND < 50	ND < 50	ND < 50	ND < 50	ND < 500	ND < 50	ND < 500	ND < 50	ND < 50
	4th Quarterly	2nd Quarter	#####	43,000	ND < 50	790	13,400	1,200	ND < 50	ND < 50	ND < 50	ND < 50	ND < 500	4,100	ND < 500	ND < 50	ND < 50
	5th Quarterly	3rd Quarter	8/2/2003	17,000	ND < 50	120	3,890	400	ND < 50	ND < 50	ND < 50	ND < 50	ND < 500	ND < 50	ND < 500	ND < 50	ND < 50
	6th Quarterly	4th Quarter	#####	43,000	ND < 50	760	16,100	1,500	ND < 50	ND < 50	ND < 50	ND < 50	ND < 500	4,100	ND < 500	ND < 50	ND < 50
	7th Quarterly	1st Quarter	2/5/2004	39,000	50	1,400	22,500	2,000	ND < 50	ND < 50	ND < 50	ND < 50	ND < 500	ND < 50	ND < 500	ND < 50	ND < 50
	8th Quarterly	2nd Quarter	5/4/2004	54,000	ND < 50	720	12,800	1,300	ND < 50	ND < 50	ND < 50	ND < 50	ND < 500	19,000	ND < 500	ND < 50	ND < 50
	9th Quarterly	3rd Quarter	8/9/2004	37,000	ND < 50	320	10,000	1,100	ND < 50	ND < 50	ND < 50	ND < 50	ND < 500	8,500	ND < 500	ND < 50	ND < 50
	10th Quarterly	4th Quarter	#####	9,800	ND < 50	68	1,940	170	ND < 50	ND < 50	ND < 50	ND < 50	ND < 500	890	ND < 500	ND < 50	ND < 50
	11th Quarterly	1st Quarter	2/6/2005	13,800	5.5	174	4,090	407	ND < 10	ND < 5.0	ND < 5.0	ND < 5.0	ND < 500	1,650	151	----	----
	12th Quarterly	2nd Quarter	#####	12,600	ND < 10	197	4,050	393	ND < 20	ND < 10	ND < 10	ND < 10	ND < 1,000	1,190	113	----	----
MW-6	Well Installation	2nd Quarter	5/1/2002	3,750	845	576	1,070	155	980	ND < 0.5	791	ND < 0.5	ND < 100	ND < 50	ND < 50	NT	NT
	1st Quarterly	3rd Quarter	8/3/2002	11,800	508	62	8,630	1,640	750	ND < 15	300	ND < 15	ND < 5,000	1,900	ND < 50	NT	NT
	2nd Quarterly	4th Quarter	#####	9,480	535	35.2	3,420	743	1,330	ND < 0.5	558	ND < 0.5	ND < 50	190	ND < 50	ND < 0.5	ND < 0.5
	3rd Quarterly	1st Quarter	2/5/2003	4,500	20	ND < 5.0	583	190	ND < 5.0	ND < 5.0	17	ND < 5.0	ND < 50	1,200	ND < 500	ND < 5.0	ND < 5.0
	4th Quarterly	2nd Quarter	#####	2,200	22	1.2	244	160	68	ND < 0.5	14	ND < 0.5	60	280	ND < 500	0.9	ND < 0.5
	5th Quarterly	3rd Quarter	8/2/2003	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	1	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 50	2,500	ND < 0.5	ND < 0.5
	6th Quarterly	4th Quarter	#####	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	1.3	ND < 0.5	ND < 0.5	ND < 0.5	ND < 5.0	ND < 50	ND < 500	ND < 0.5	ND < 0.5
	7th Quarterly	1st Quarter	2/5/2004	110	4.2	ND < 0.5	ND < 1.0	ND < 0.5	16	ND < 0.5	5.6	ND < 0.5	ND < 5.0	ND < 50	ND < 500	ND < 0.5	ND < 0.5
	8th Quarterly	2nd Quarter	5/4/2004	2,200	25	2.4	200.5	4.0	69	ND < 0.5	17	ND < 0.5	27	590	ND < 500	ND < 0.5	ND < 0.5
	9th Quarterly	3rd Quarter	8/9/2004	880	14	ND < 5.0	ND < 15	ND < 5.0	220	ND < 5.0	16	ND < 5.0	280	470	ND < 500	ND < 5.0	ND < 5.0
	10th Quarterly	4th Quarter	#####	110	3.6	ND < 0.5	ND < 1.5	ND < 0.5	16	ND < 0.5	3.2	ND < 0.5	ND < 5.0	1,000	ND < 500	ND < 0.5	ND < 0.5
	11th Quarterly	1st Quarter	2/6/2005	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	3.6	ND < 0.5	1.0	ND < 0.5	ND < 50	ND < 50	86	----	----
	12th Quarterly	2nd Quarter	#####	ND < 50	ND < 0.5	ND < 0.5	ND < 1.0	ND < 0.5	2.1	ND < 0.5	0.8	ND < 0.5	ND < 50	ND < 50	71	----	----

TPHg: Total petroleum hydrocarbons as gasoline

MTBE: Methyl tertiary butyl ether

DIPE: Diisopropyl ether

TAME: Tertiary amyl methyl ether

TPHd: Total petroleum hydrocarbons as diesel

NT: Not tested.

TBA: Tertiary butanol

ETBE: Ethyl tertiary butyl ether

TPHmo: Total petroleum hydrocarbons as motor oil

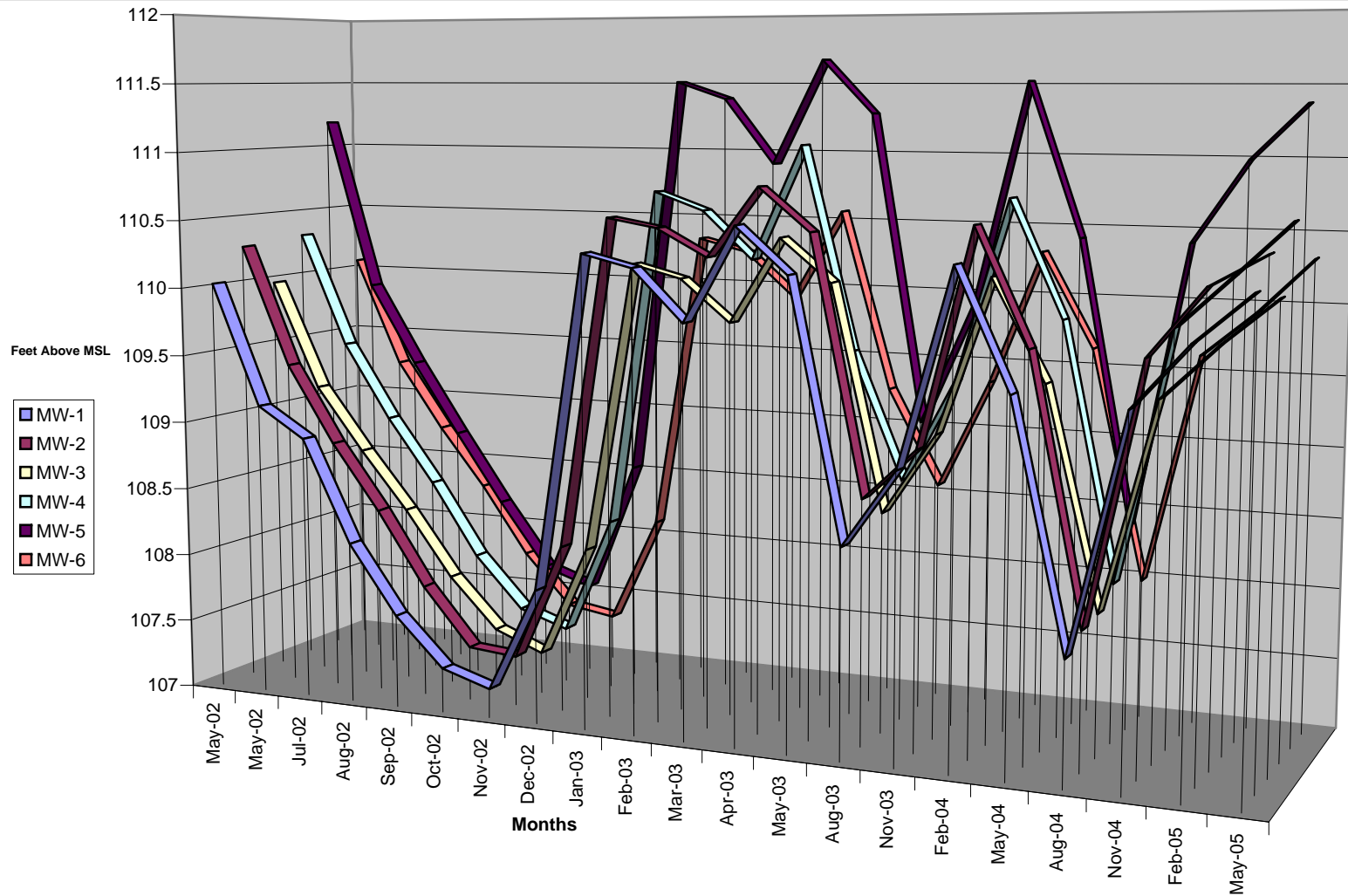
ppb: parts per billion = µg/l = .001 mg/l = 0.001 ppm.

ND: Not detected. Sample was detected at or below the method detection limit as shown.

# Chart 1

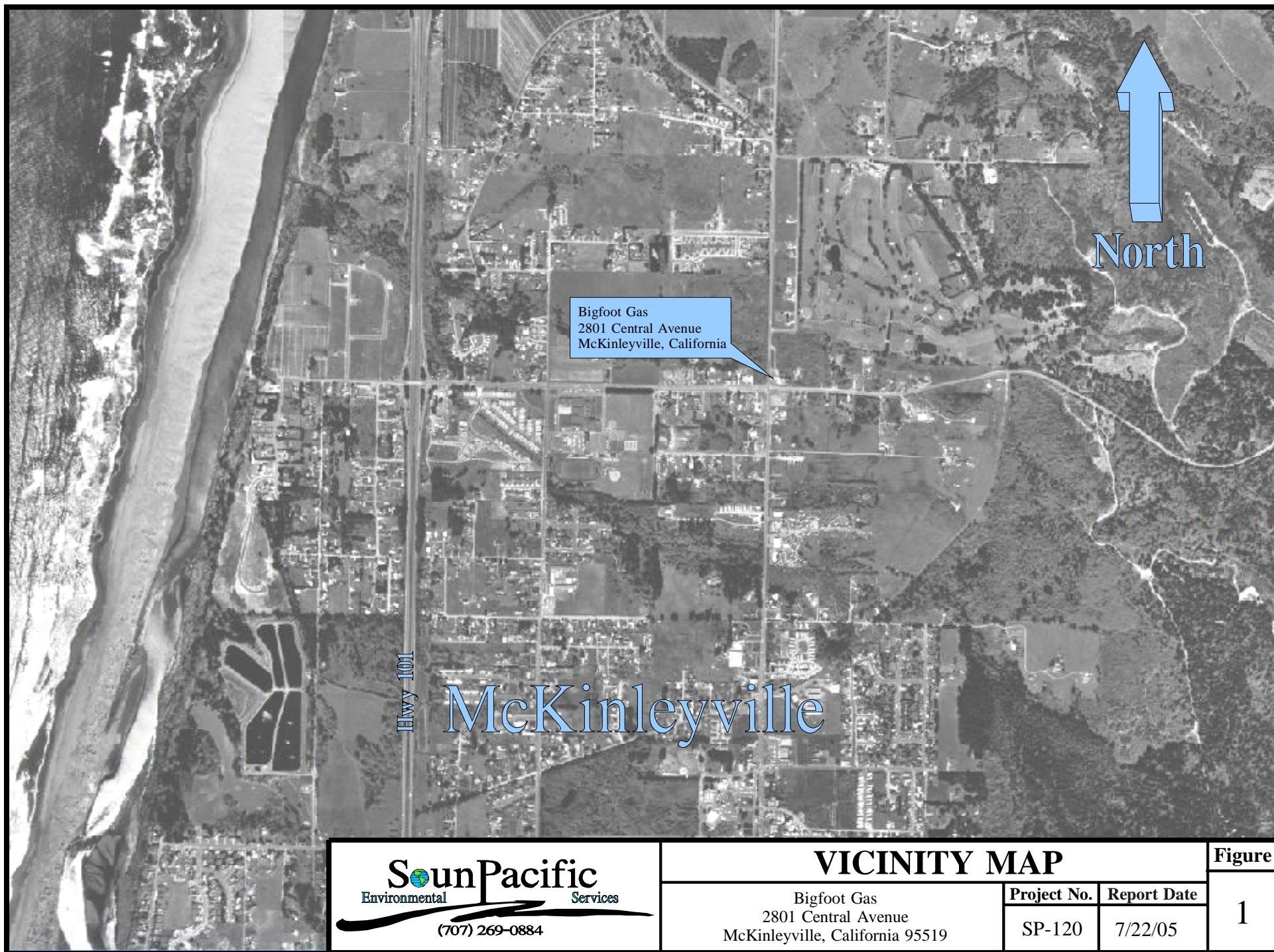
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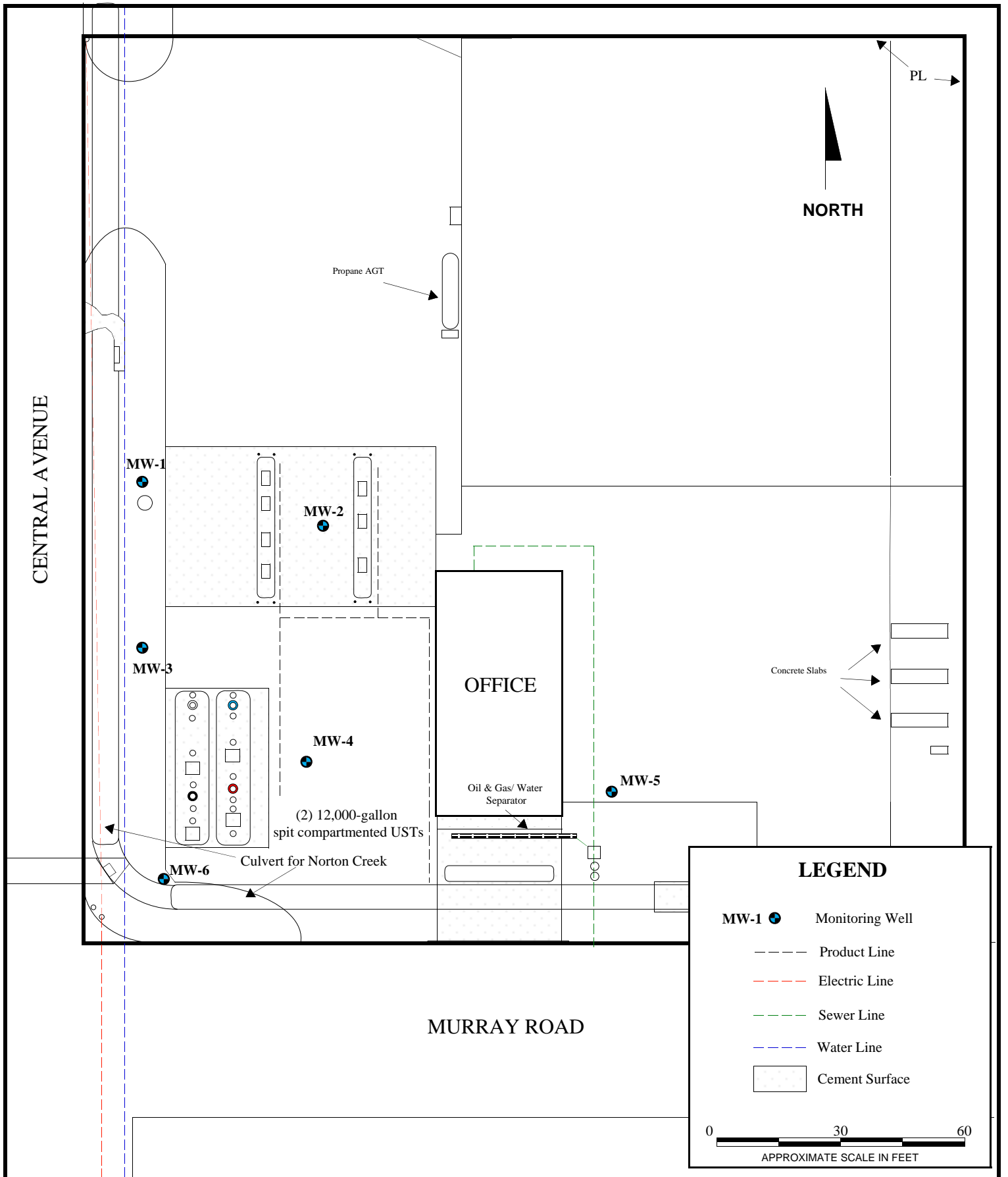
Bigfoot Gas  
2801 Central Avenue  
McKinleyville, California 95519



# Figures







## SITE PLAN

Bigfoot Gas  
2801 Central Avenue  
McKinleyville, California 95519

Project No.

SP-120

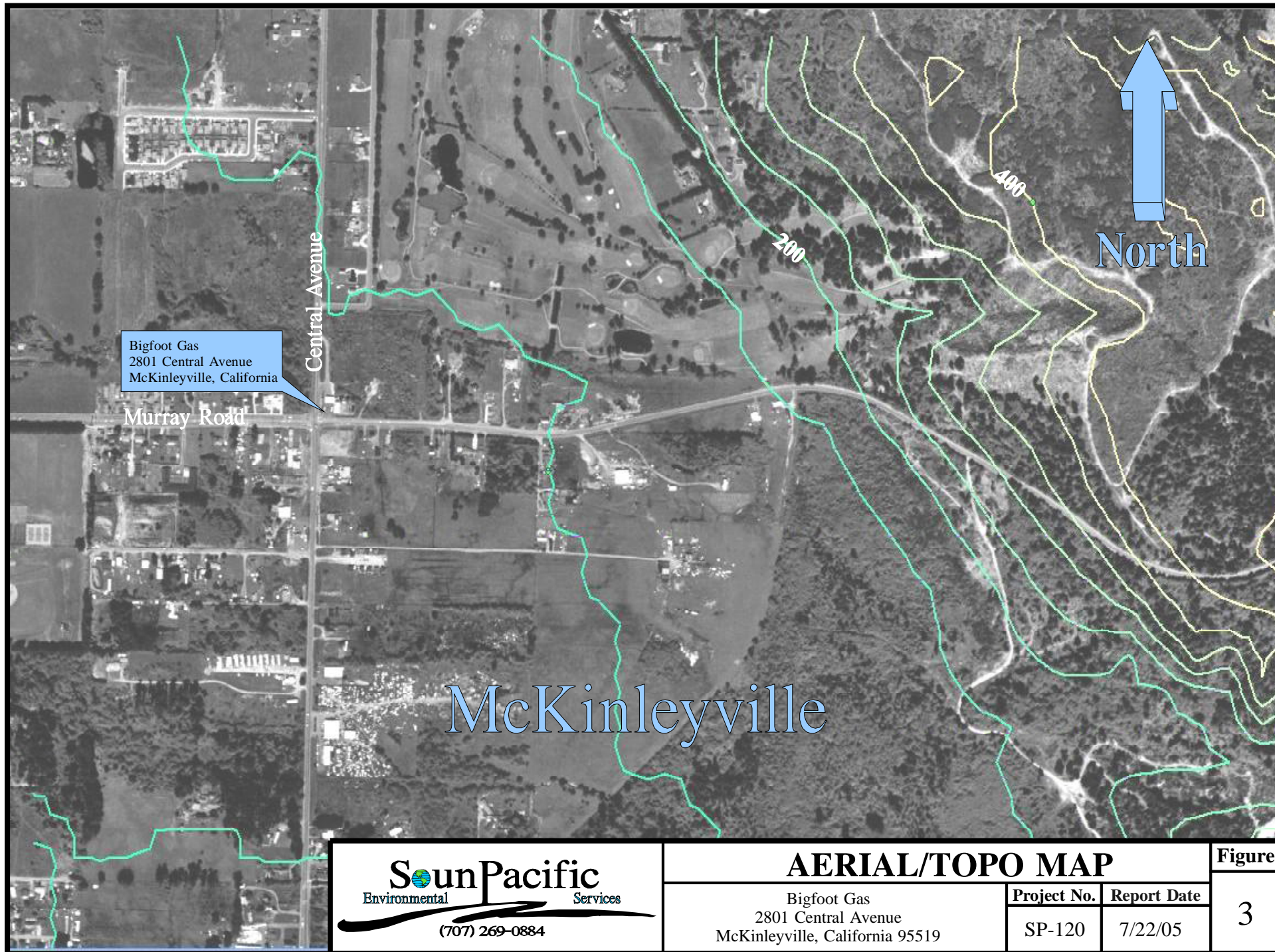
Report Date

7/22/05

Figure

2





CENTRAL AVENUE

NORTH

PL →

MW-1

MW-2

MW-3

MW-4

MW-5

MW-6

MURRAY ROAD

### LEGEND

MW-1  Monitoring Well

0 30 60  
APPROXIMATE SCALE IN FEET

### SUMMARY OF GROUNDWATER FLOW DIRECTIONS

Figure

Bigfoot Gas  
2801 Central Avenue  
McKinleyville, California 95519

Project No.

SP-120

Report Date

7/22/05

4

Environmental






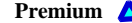



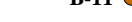








Services



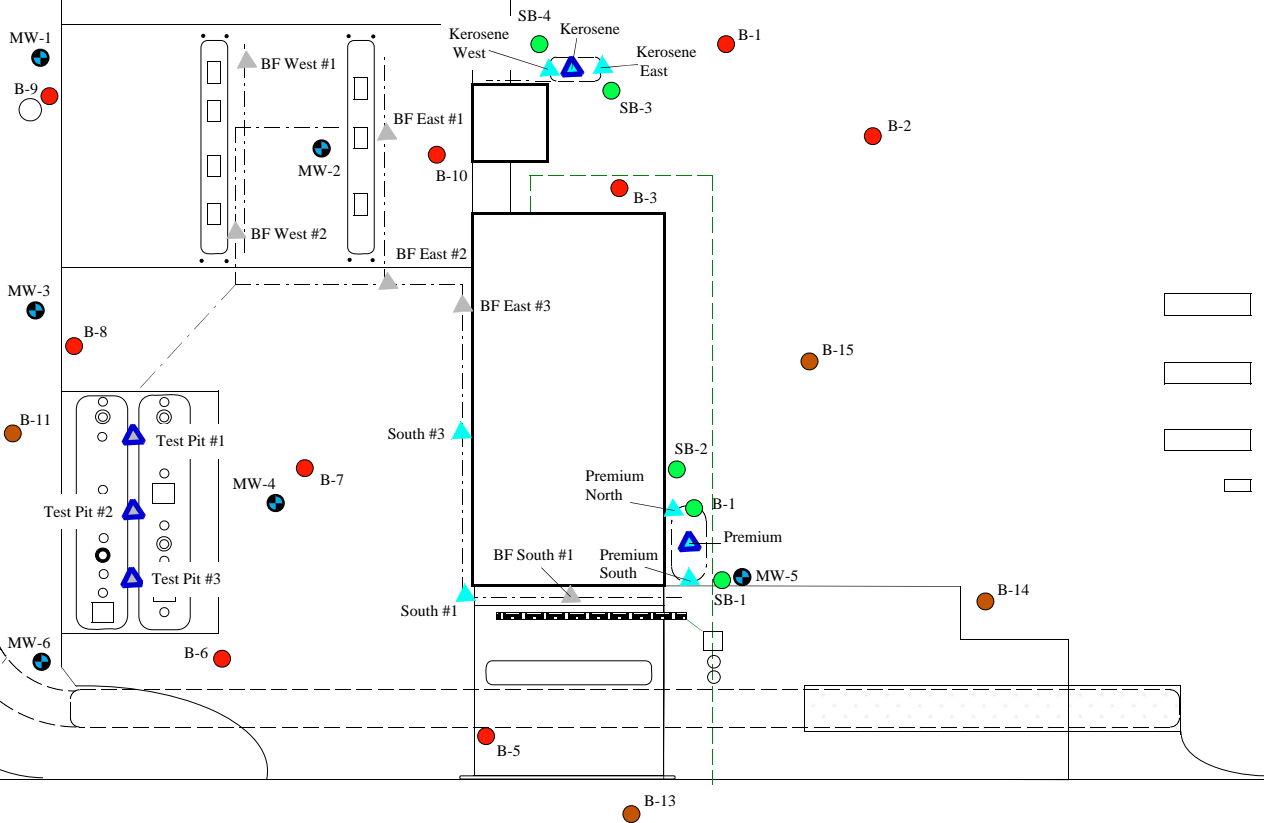
CENTRAL AVENUE

NORTH

## LEGEND

-  Removed UST
-  Product Lines
-  BF East #1
-  Test Pit #1
-  South #1
-  Premium
-  SB-4
-  B-1
-  B-11
-  MW-1
-  Soil Sample (6/91)
-  Groundwater Sample (5/91)
-  Soil Sample (7/91)
-  Groundwater Sample (7/91)
-  Previously Drilled Soil Boring (1995)
-  Previously Drilled Soil Boring (9/00)
-  Previously Drilled Soil Boring (4/02)
-  Existing Monitoring Well

0 30 60  
APPROXIMATE SCALE IN FEET



MURRAY ROAD

## PREVIOUS INVESTIGATIONS

Bigfoot Gas  
2801 Central Avenue  
McKinleyville, California 95519

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Figure

5




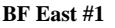






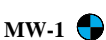
Environmental

Services

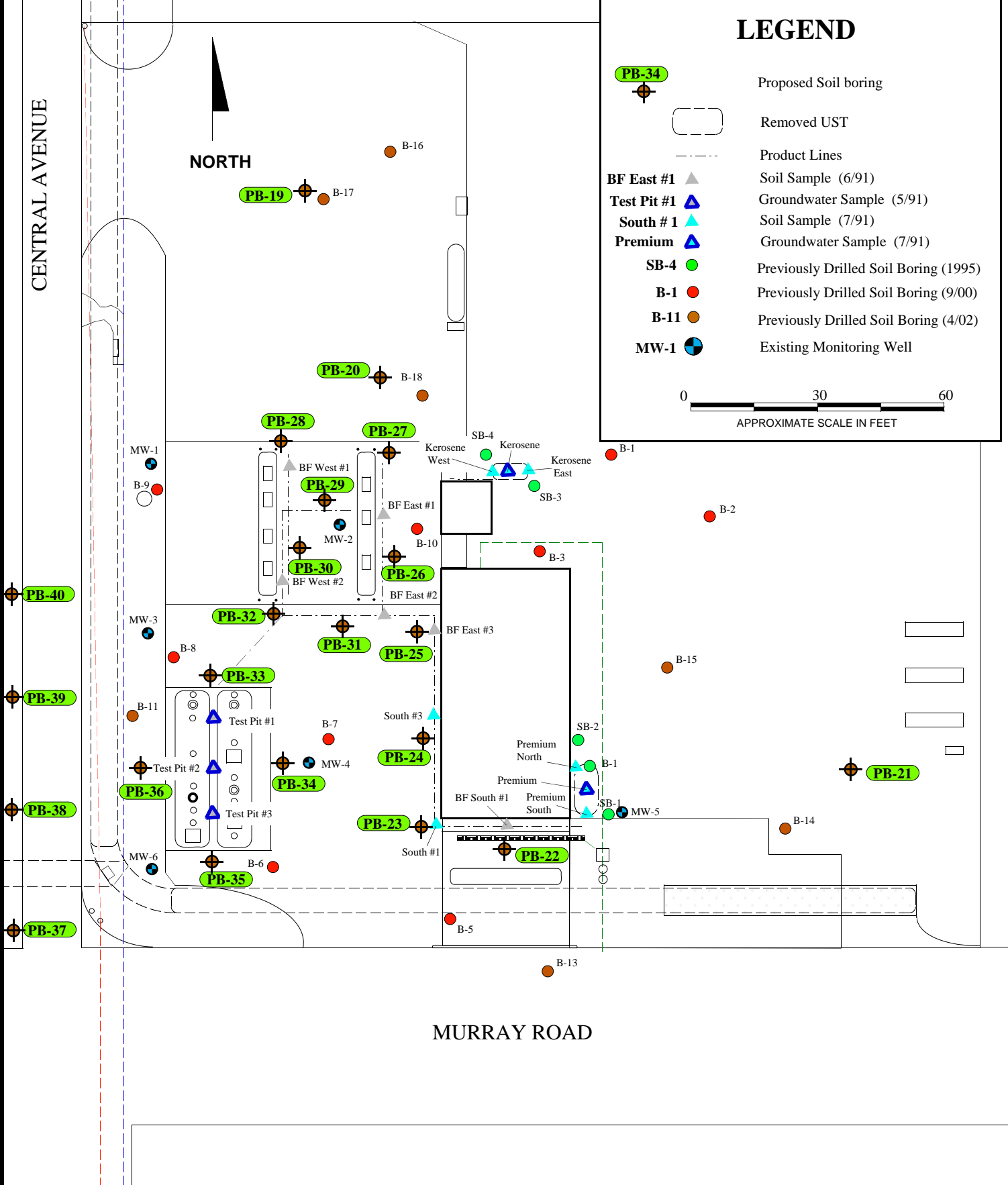
CENTRAL AVENUE

NORTH

# LEGEND

-  Proposed Soil boring
-  Removed UST
-  Product Lines
-  BF East #1 Soil Sample (6/91)
-  Test Pit #1 Groundwater Sample (5/91)
-  South #1 Soil Sample (7/91)
-  Premium Groundwater Sample (7/91)
-  SB-4 Previously Drilled Soil Boring (1995)
-  B-1 Previously Drilled Soil Boring (9/00)
-  B-11 Previously Drilled Soil Boring (4/02)
-  MW-1 Existing Monitoring Well

0 30 60  
APPROXIMATE SCALE IN FEET



MURRAY ROAD

## PROPOSED INVESTIGATION

Figure

Bigfoot Gas  
2801 Central Avenue  
McKinleyville, California 95519

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SP-120

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7/22/05



















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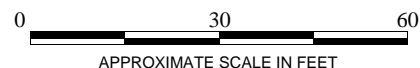


CENTRAL AVENUE

NORTH

# LEGEND

-  Estimated Limits of Soil Contamination
-  Product Lines
-  BF East #1
-  Test Pit #1
-  South #1
-  Premium
-  SB-4
-  B-1
-  B-11
-  MW-1
-  Soil Sample (6/91)
-  Groundwater Sample (5/91)
-  Soil Sample (7/91)
-  Groundwater Sample (7/91)
-  Previously Drilled Soil Boring (1995)
-  Previously Drilled Soil Boring (9/00)
-  Previously Drilled Soil Boring (4/02)
-  Existing Monitoring Well



Soil Results in ppm

G = TPHg  
D = TPHd  
O = TPHmo  
B = Benzene  
E = Ethylbenzene  
T = Toluene  
X = Xylenes  
M = MTBE

MURRAY ROAD

## Possible Source Areas

1. Current UST System
2. Product Line East of Eastern Most Dispenser
3. Product Line Adjacent to the West of Office Building
4. End of Product Line near MW-5

## PLAN VIEW OF POSSIBLE SOIL CONTAMINATION AND SOURCE AREAS

Figure

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